

ABSTRACT OF THE DISCLOSURE

An electronically controlled, liquid-crystal eyeglass system is provided, designed for intermittent occlusion, while exercising the eyes of a user, through combined occlusion-and-exercising sessions, wherein the eyeglass system includes features to improve and monitor compliance. Specifically, features to improve compliance include an ordinary eyeglass design, wherein the electronic components are miniaturized and hidden, and a reflective coating on the exterior surfaces of the lenses, for identical exterior appearance, even when the two lenses operate at different opacity levels. In this manner, the liquid-crystal eyeglass system does not attract attention. Additionally, a fashionable design, and possibly also, a fashionable designer's brand name may be employed. In order to monitor compliance, the times, dates, and durations of the occlusion-and-exercising sessions that took place are recorded by the system. A computerized implement is provided, to present feedback to the user, preferably, in a playful manner.

The liquid-crystal eyeglass system may be used in the treatment of amblyopia, strabismus, and a weak eye, and may be integrated with sunglasses and (or) with glasses for corrective vision.